B4105-29.11A

Research Bulletin

U.S. Regional Outlook 1982-1983

Summary of an April 1982 Meeting of The Conference Board's Regional Economic Forum

The Conference Board

number 118

BEST AVAILABLE COPY

The Conference Board's fourth annual economic forum met at the beginning of April, gathering eight experts from around the country. The Forum's deliberations are summarized in this report.

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HIGHLIGHTS

The 1981-1982 slump is being felt in New England. However, the region has low concentrations of the heavy durables manufacturing that is so severely affected by the recession. Indeed, durables manufacturing is a plus for the region because of the strength not only of high-technology industries but of others such as defense-oriented aircraft and shipbuilding. Employment growth in other private industries is generally slow and government employment is falling. Provided the national economy recovers, however, New England can look forward to sustained although moderate growth beyond 1982.

NEW ENGLAND

INDUSTRIAL HEARTLAND

The Industrial Heartland is badly depressed and will remain weak until interest rates come down and money flows easily once again. The end of inventory liquidation and the July 1 personal tax cuts will help to revive production of consumer durables, but the ongoing erosion of corporate profits will sharply curb production of machinery and equipment for business investment. However, if interest rates come down and stay down, the cyclical rebound in 1983 will be far stronger in the Heartland than nationally.

The Mid-Atlantic economy should soon begin a modest advance roughly in line with that anticipated for the national economy. Recovery will be slow because real interest rates are expected to decline only slowly, but the recent good performance of the region in the face of adverse national conditions augurs well. A large part of the recent good showing reflects employment strength in New York City, particularly in construction, services and finance-insurance. The region's long secular decline seems to be over and there will be less drag on growth in the 1980's than there was in the 1970's.

MID-ATLANTIC

SOUTHEAST

The recession's impact is less severe in the Southeast than in some other regions, but the slump is certainly being felt. Although there is considerable distress in the region's airline, auto, construction and textile industries, the Southeast continues to benefit from its orientation toward service industries and light rather than heavy manufacturing. Assuming that inflation and interest rates decline, prospects look good for a modest recovery, regionally and nationally, beginning by late this year.

A NOTE ABOUT REGIONS

The definitions established by the Census Bureau are probably the most familiar to users of regional data, and they are used here with only one amendment—a different treatment of Pennsylvania. The relationship of The Conference Board Forum's regions to the Census Bureau's regional divisions is as follows: New England = New England; Mid-Atlantic = Middle Atlantic less Pennsylvania; Industrial Heartland = EastNorth Central plus Pennsylvania; Southeast = South Atlantic plus East South Central; Breadbasket = West North Central; Southwest = West Central; Mountain = Mountain; Pacific = Pacific.

Although 1981 began with some optimism over prospects for stronger farm prices, the optimism was largely unfounded. Farmers experienced the adverse price impact of large supplies of some crops. More importantly, the weakness of the U.S. economy and the economies of our trading partners made for sluggish end-market demand for farm products. The outlook is one of continued weakness in farm prices in 1982, and the third consecutive disappointing year for farm income.

AMERICA'S BREADBASKET

SOUTHWEST

The Southwest has been affected by the 1981-1982 recession, but less severely than the nation as a whole. Texas and Oklahoma continued to benefit in 1981 from accelerated oil and gas drilling and exploration, but such activity seems to have peaked and to be declining this year. The Arkansas economy is hurt by its important concentration of housing-related manufacturing and its depressed agricultural sector, while in Louisiana the older parts of the petroleum industry are adjusting downward.

Falling oil prices, declining government employment, and problems in the high-technology sector related to recession and foreign competition are combining to cause some doubt about the usual rosy forecast for the Mountain region. The most crucial variable in the 1982-1983 outlook is the price of oil, for substantial further declines would have a large negative impact on the region. Beyond the near term, however, it is difficult to envision any scenario in which the region does not outperform the nation.

MOUNTAIN STATES

PACIFIC

Business conditions continue to weaken in the Pacific region as the recession's impact spreads to a broader group of industries. Unemployment is highest in the lumber regions, but job growth in most other industries is very disappointing. Conditions will be quite poor for much of this year, but the longer run outlook is brightened by the region's orientation toward the fast-growth industries of the future—aerospace, electronics, high-technology research, specialized agriculture, services and foreign trade.

The Recession is Pervasive— An Overview

Lora S. Collins
The Conference Board

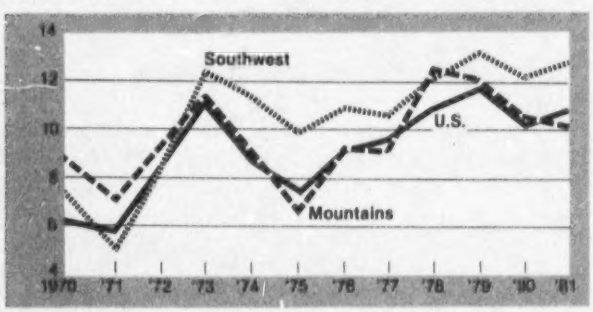
Lora S. Collins

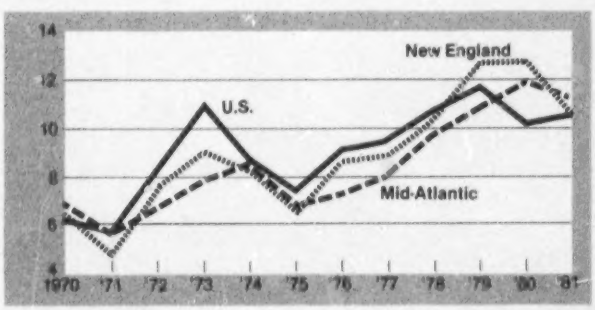
The meeting of the Regional Economic Forum in the Spring of 1982 was not a cheerful event. Forum participants look for only a modest upturn in economic activity in the second half of 1982, and expect this year to end with the economy operating at a level virtually unchanged from that at the end of 1979. This three-year period of stagnation is in sharp contrast to the average annual growth of more than 4 1/2 percent from 1975 to 1979. Not only do the Forum participants see no prospect of rapid cyclical rebound this year, they think it possible that economic growth will be subdued into 1983 and even beyond. The key to all this is the commitment of monetary policy to wringing inflation out of the U.S. economy. As Forum participants noted, the anti-inflation struggle is proving to be a war of attrition, not a blitzkrieg; one said that we are experiencing not a business cycle but a siege.

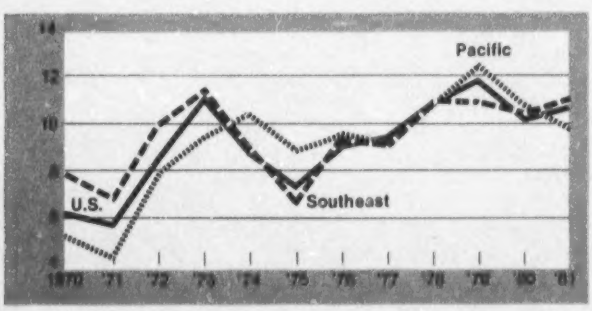
National economic conditions are the most important factor influencing any region's economy. In this sense, no region is recession-proof. In fast-growth regions, a national recession manifests itself as a slowdown of growth, which certainly constitutes a sharp deviation from a fast-growth region's norm. Chart 1 shows the similarity of cyclical patterns in the nation's regions. The sense of the latest Regional Forum is that the entire economy is being repressed, with unmistakable impacts on every region.

One participant suggested that certain structural forces are at work to depress economic activity in 1982, in addition to purely cyclical phenomena. Foremost among the structural forces is the determinedly anti-inflationary stance of the Federal Reserve, leading to persistent financial market uneasiness and extraordinarily high interest rates. The Forum felt that the depressant impact of monetary policy could be called a structural factor because it diverges so much from the past path of monetary policy, and is having such an unusually repressive effect on all credit-sensitive sectors. Other structual depressant factors mentioned are: (1) the straitened circumstances of state and local governments, which have ceased to be a growth sector as a consequence of tax limitation movements and reduced federal aid; (2) the deregulation movement, which has sharply changed the operating environment of industries such as trucking, airlines and finance; (3) the drop in energy prices, which has had a major depressing effect on exploration and production. The Forum was not sure that the energy price situation is permanent enough to be called a "structural"

Chart 1: Year-to-Year Percent Change in Per Capita Personal Income







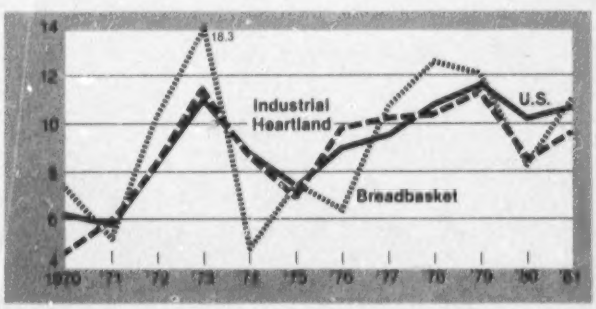


Table 1: Percent Composition of Employee and Proprietors' Income[1]

	Agri-Culture	Con-struction	Mining	Non-durables Mfg.	Lumber & Furniture	Mach'y & Instru-ments	Metals	Motor Vehicles	Other Durables Mfg.	Federal Gov't	State & Local Gov't	All Other[2]
New England	1.0	4.6	0.1	9.2	0.9	11.6	4.4	0.3	5.5	3.6	10.5	48.2
Industrial Heartland	2.0	5.4	1.0	9.3	0.9	9.5	8.4	4.9	2.8	2.7	9.8	43.4
Mid-Atlantic	0.8	3.8	0.2	10.9	0.4	8.0	2.7	0.8	2.2	3.1	12.1	55.0
Southeast	2.8	6.1	1.8	11.7	1.7	3.9	2.8	0.7	2.2	9.6	11.2	45.6
Breadbasket	6.6	6.3	1.2	8.8	0.8	6.4	1.9	1.1	4.4	4.0	10.6	48.0
Southwest	3.4	8.3	6.3	8.3	1.0	4.8	2.8	0.4	1.5	5.1	9.9	47.1
Mountain	3.6	8.6	5.4	4.0	1.3	4.2	2.1	0.2	2.3	7.0	12.0	49.2
Pacific	3.5	6.4	0.6	6.1	2.0	6.2	2.4	0.5	4.6	6.[illegible]	11.9	49.8

[1]Based on average of 1979 and 1980 data.
[2]Finance, insurance, real estate, trade, transportation, communication, utilities, services.

change, but felt that it certainly comes close to qualifying. The discussion at the meeting suggested that the augmenting of normal cyclical forces by these structural factors explains why the 1981-1982 slump is felt to be so pervasive.

It goes without saying that the Industrial Heartland is hurting. Homebuilding everywhere is in greater trouble than usual in a cyclical slump, accompanied by depressed conditions in lumber, furniture and household durables. Office construction, on the contrary, is booming everywhere, but there are concerns about overbuilding. Construction is a relatively more important industry in fast-growth areas, and thus a relatively important factor in their experiencing of the current recession. The troubled lumber industry is concentrated in the Pacific and Southeast regions, and the latter also has considerable furniture and appliance manufacturing.

The problems of state and local governments are also a factor in every region, but perhaps most notably on the west coast where rapid growth of this sector had seemed a permanent fact of the employment situation. With respect to deregulation, the Southeast and Pacific regions were mentioned as particularly affected by the condition of the airlines—the former as a region where airlines are an important employer, the latter as an aircraft producer. Declining prices and excess capacity are causing a shakeout from the previous boom in oil exploration and this is a negative factor in the Southwest and Mountain regions.

The agricultural situation has not been counted as a "structural" depressant, but it certainly is reinforcing the business cycle downturn. Agriculture is in difficulty everywhere, partly for reasons of nature but partly also because of the state of the economy—specifically, weak final markets and high interest rates.

The relative bright spot is the northeastern corner of the country—New England and the Mid-Atlantic. Part of the reason is industry mix: These regions have low concentrations of the industries that are suffering the worst slumps and high concentrations of those that are not seriously depressed, such as a broad range of services and, in New England, defense and high-technology manufacturing. Table 1 shows New England having the nation's highest concentration in machinery and instruments manufacturing. To a considerable extent, this reflects "high-tech" industries, although it is not possible in these data to separate them from the more mundane. New England's high concentration in "other durables" includes defense-related aerospace and shipbuilding industries. In addition to industry mix, there is also the fact that New England and the Mid-Atlantic states had their fiscal crises in the mid-1970's and have already adjusted to the slower growth of state and local government that is currently a substantial negative force elsewhere.

A year ago, the Forum focused on longer run prospects. The focus this year was exactly the opposite, that is, it centered on the pervasiveness and severity of the 1981-1982 slump. There was even some discussion of the possibility that the recession could cumulate into a more

Table 2: Regions in Which Selected Industries are Most Important, as Measured by Percentage of Employee and Proprietors' Income[1]

	Industry's Percent of Income in Region(s) where Most Important	Industry's Percent of Income in Rest of United States
Agriculture	BB 6.6	2.5
Construction	SW 8.3, MTN 8.6	5.5
Oil & gas mining	SW 6.0, MTN 2.0	0.2
Textiles & apparel	SE 3.9	1.0
Lumber & furniture	PAC 2.0, SE 1.7	0.8
Machinery & Instruments	NE 11.6	6.6
Metals	IH 8.4	2.7
Motor vehicles	IH 4.9	0.6

[1]Based on average of 1979 and 1980 data.

serious decline. Implicit in the Forum proceedings is a view that the 1980's will be a period of favorable economic conditions in all regions, if we succeed in stimulating capital formation. However, there was a clear sentiment that the path from here to there is dark, bumpy and not guaranteed.

New England

Frederick Breimyer
First National Bank of Boston

Frederick Breimyer

Much has been written on the improved economic health of New England, so much so that an aura of invulnerability is often attributed to the region. A year or so ago, one heard that New England was recession-proof; today we hear it is recession-resistant. In fact, the 1981-1982 recession has come to New England.

From the outside, New England is often regarded as relatively homogeneous and developed. In fact, the three northern states of Maine, New Hampshire, and Vermont historically have been slow to develop and, where once developed, have lost much of the manufacturing base without adequate replacement. In the 1970's, this began to change markedly as all three states experienced new growth around high-technology industries.[1] In Vermont, the growth was located mostly near Burlington, while in Maine and New Hampshire growth was located near their southern borders.

Massachusetts served as the wellspring for much of the high-technology growth within New England and remains the dominant state within the region. It accounts for virtually one-half of New England's total nonagricultural employment and has the most extensive high-technology and service sectors. Connecticut, the other large, economically diversified state, is well favored. Its per capita income is the highest of any state in the country, save Alaska, and almost 50 percent higher than that of Maine or Vermont. Connecticut manufacturing is concentrated in transportation equipment and is highly sensitive to military contracts. Rhode Island is also highly industrialized, but much more along traditional New England lines, with heavy concentrations in textiles and jewelry. The state is much less closely tied to military spending than it was during the early 1970's.

The hallmark of New England is not homogeneity, but diversity. The aging and decline of long-standing industries is balanced by the emergence and growth of new ones. The good news about New England is that this transition continues. It is the process of regeneration which makes the New England economy viable, rather than any particular economic environment. Nonetheless, today's economic environment is having a negative impact. The long-term slide in nondurables manufacturing employment, which was arrested temporarily following the recession of 1974-1975, has resumed. However, what marks the current period is not so much the severity of job losses as the wide diffusion of these losses across New England's industries and states. The only nondurables industries in New England experiencing meaningful growth in employment since late 1978 have been printing and publishing and, to a lesser degree, the related paper and paper products industries. Relative to national trends, nondurables employment in New England is weak, although less strikingly so than it was during the 1960's and early 1970's.

The region's counterweight is durable goods manufacturing, featuring a concentration of high-technology industries and underrepresentation of automotive manufacturing. Durable goods employment in New England has risen by almost one-quarter since 1975, and about 70 percent of that gain has occurred in high technology manufacturing. Durable goods employment outside of high-technology also has proven resilient in the face of recession. This has been particularly true—at least until very recently—of the transportation equipment industry in Connecticut with its emphasis on aircraft and shipbuilding. Wood and furniture manufacturers have suffered major cutbacks in employment, however.

New England benefits from a growing service sector, most of which is located in Massachusetts. Within Massachusetts, about one-half of the service sector is dedicated to health and education. Growth of the service sector in New England has matched the national average increase, but other private industries have not kept up with their national counterparts. New England is not a transportation or distribution center and it is not oriented toward construction although commercial development

[1] High-technology manufacturing is defined here broadly to include all electrical and nonelectrical equipment plus scientific instruments.

Table 3: Employment Growth Rates and Percent Composition—New England and United States

	Employment Growth(%)				Composition	
	1975-1979		1979-1981		In 1981 (%)	
	NE	US	NE	US	NE	US
Manufacturing	17.1	14.9	—0.9	—3.7	27.5	22.1
Nondurable goods	8.0	8.5	—4.5	—1.9	10.0	8.9
Durable goods	23.3	19.5	1.2	—4.9	17.5	13.3
High technology	29.9	22.8	4.2	1.4	9.4	5.9
Nonmanufacturing	15.4	17.3	3.2	3.6	72.5	77.9
Government	10.7	8.6	—3.5	0.7	14.6	17.5
Services	23.1	23.2	9.9	8.7	22.8	20.3
Trade	14.8	18.3	2.1	2.7	21.4	22.8
Other	11.0	19.6	2.2	2.4	13.6	17.4
Total Nonagricultural	15.9	16.7	2.0	1.9	100.0	100.0

has done well in recent years. It does, however, have a number of prestigious financial firms. Taken together, the growth of employment in these sectors—trade, construction, finance, and transportation and public utilities—has been slow. Also, government employment has not increased in any state since 1978, and in Massachusetts the number of state and local workers has fallen sharply owing to property tax limitations embodied in Proposition 2 1/2 and to state budgetary cutbacks.

The outlook for New England is more bright than bleak, but the region is not immune from cyclical downturns. Nondurables employment is likely to continue to underperform the national pace. Hence, prolongation of recession raises the specter of enduring hardship. Shoe and textile companies still close in New England, and when they do, they leave an older and largely immobile work force with few immediate opportunities. High-technology industry views the recession more as a temporary interruption of growth than a serious challenge. The question of the industry's viability arises much more in the context of long-term international competitiveness. In this regard, a First National Bank of Boston survey of capital spending in New England shows high-technology firms continuing to support future expansion. Still, the recession has caused employment growth to stagnate as new orders and cash flow have been crimped. Hiring is being cut back even among the industry's elite, and some layoffs industrywide are foreseeable.

If nondurables employment is likely to continue eroding and durable goods employment is to remain on "hold" with prospects for minor job losses, so, too, gains in service sector employment are likely to slow. There has been little direct evidence from employment data so far, but health and education employment is vulnerable to reductions contained in the Reagan budget. The number of government workers in the region is expected to decline. Although the job cutbacks stemming from Proposition 2 1/2 in Massachusetts are beginning to abate, the loss of federal grants-in-aid will keep state and local governments under budgetary pressure not only this year but for the foreseeable future. Other nonmanufacturing jobs are expected to expand, but very slowly. The upturn in the national economy expected at midyear should boost growth in trade and construction. Employment growth in finance has been only slightly affected by the recession so far, but the distress of thrift institutions could seriously reverse growth trends now in place. Employment in transportation and public utilities should revive with a lag, so the improvement here is expected to occur in 1983.

Finally, it should be recognized that if New England characteristically grows less rapidly than the nation, it can also do with less growth. The labor force expands much less rapidly than elsewhere, and New England now enjoys a legacy of a relatively low unemployment rate stemming from the late 1970's. Last year, New England's unemployment rate averaged 6.4 percent versus 7.6 percent nationally, and by the end of the year the region's unemployment rate stood a full 2 percentage points below the national level. This suggests, if it does not demonstrate, that economic success can come not only through the dynamics of capitalistic regeneration aided by public policies, but also by having restrained growth in population.

"The Industrial Heartland"

Elizabeth A. Bossong
United States Steel Corporation

The Heartland has had a massive coronary, and no amount of intensive care will relieve it until interest rates come down and money flows easily once again through the key arteries of the industrial sector.

Elizabeth A. Bossong

In industry after industry, one must search back over 20 years or more to find parallels with current operating levels. The steel industry operated at 60 percent of capability in the first quarter of 1982, falling further to the low 50's during April. Auto production was at a 4-million-unit seasonally adjusted annual rate in the first quarter, as stocks were reduced, while domestic sales were at a somewhat higher but still depressed 6-million-unit rate, aided by rebates.

Layoffs have been widespread among metalworking companies and producers of construction equipment and appliances. Freight car orders and deliveries are at a virtual standstill, jobless rates in industrial centers are double the national averages, and—reflecting the sharp reduction in business activity in the central core of the nation—there has been a widespread collapse in construction.

Nationwide, as housing starts declined from 1.7 million units in 1979 to 1.1 million in 1981, housing contract awards in current dollars fell by 22 percent; the Heartland's share of that sagging total fell from 20 percent in 1979 to 15.5 percent in 1981, and the share was still dropping in the early months of 1982. Similarly, contract awards for nonresidential building (in millions of square feet) dropped 15 percent between 1979 and 1981 nationwide; in the Heartland, the decline was 36 percent.

Any assessment of the key manufacturing sectors provides grim reading. Car production this year may not match last year's depressed total of 6.25 million, and will be roughly one-third below 1977 and 1978 totals. Truck output will be marginally higher than in 1980-1981 but not much more than half the 1979 total. Appliance output will fall below the disappointing 1980-1981 levels and will be 15 percent below the 1977-1979 average. Freight car deliveries will total only about 25,000, far below the 88,000 average of 1979-1980. Barge production will be down 50 to 75 percent from last year. Steel output will fall below the weak levels of 1980 and 1981 and will be 30 percent below 1979.

Moreover, for almost every producer of goods, the impact of unfair trade—exacerbated by an overvalued dollar that is in large part the result of high interest rates—depresses operating levels as export opportunities contract and imports rise. In steel, import penetration of the U.S. market climbed from 14 percent in the first quarter of 1981 to 23 percent in the first quarter of 1982. Unfairly traded steel imports, subsidized by foreign governments, have been a key element in driving down operating levels, reducing not only employment but also the cash flow necessary to increase the efficiency of steel operations. Chart 2 tracks some of the key Heartland industries during the past eight years, and makes clear that 1982 is a disaster.

The end of inventory liquidation and the July 1 personal tax cuts will contribute to a revival in the output of consumer durables in the second half of 1982. However, the ongoing, devastating erosion of corporate profits (resulting from climbing unit costs because of the recession-caused drop in output per hour; the loss of volume; and price weakness) will sharply curb business investment programs. Shrinking internal cash flow will restrict investment, and the unprecedented real cost of money makes borrowing for investment purposes virtually impossible. Plant and equipment spending will decline at least until Fall. The decline would be much steeper were it not for the investment tax incentives enacted last Summer.

Chart 2: Production Trends in Industries Important to the Heartland

Indexes: 1967 = 100 (Seasonally Adjusted)

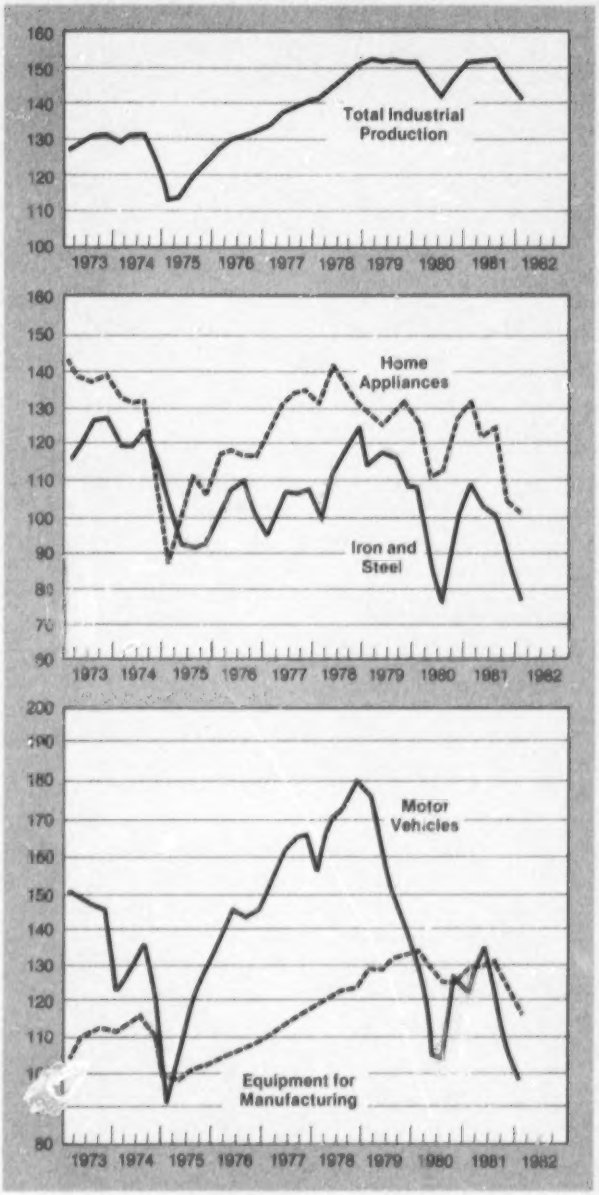


Table 4: Construction Contracts[5]—Industrial Heartland and United States

	1979	1980	1981	Percent change 1979-1981	Year to date 1981	Year to date 1982
	Nonresidential Buildings—Millions of square feet					
U.S.	1,377	1,200	1,166	– 815	270	219
IH	320	257	206	– 36	45	30
IH as % of US	23	21	18		16	14
	Residential Building—Millions of dollars					
US	71,804	60,266	56,184	– 22	13,513	9,771
IH	14,457	9,938	8,729	– 40	1,689	1,004
IH as % of US	20	16	16		12	10

[5]F.W. Dodge data. Industrial Heartland represented by F.W. Dodge Regions 4 and 5.

As a result, machinery output in total will decline by 7 percent to 10 percent from the 1981 total; and the drops are likely to be steeper for farm implements and construction equipment. Nonresidential construction will also be sliding throughout the year, with the regional pattern of contract awards making it clear that the Heartland's decline will be deeper than the sagging national totals.

On the more positive side, *if* interest rates come down and stay down (and that is the critical element to a sustained economic recovery), the cyclical rebound in 1983 will be far stronger for the Heartland than for the rest of the nation. The volatile durable goods industries will come roaring back in 1983—at least compared with the disaster levels of 1982. The recovery will still be far from complete, and 1984 should also be a year of better-than-average growth for these states. Indeed, the long-term trend of U.S. economic activity from north to south will be overwhelmed by the cyclical rebound in the 1983-1984 period. But the rebound of the Heartland remains dependent on the lifeblood of adequate credit availability to permit national industrial revival.

The Mid-Atlantic

Thomas J. Spitznas
Chemical Bank

Thomas J. Spitznas

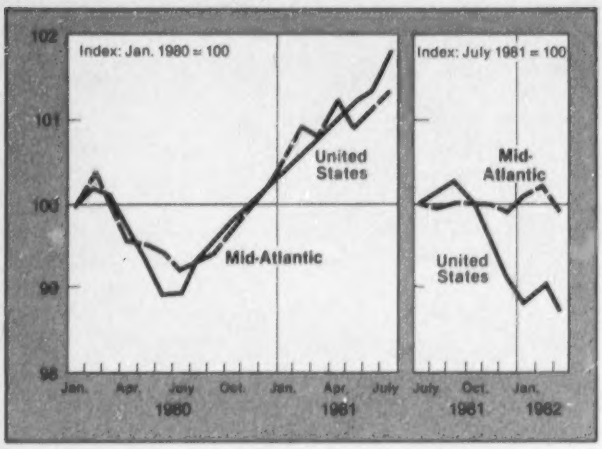
Having, at least so far, successfully weathered the second of two national recessions in as many years, the Mid-Atlantic economy should soon begin a moderate advance roughly in line with the anticipated recovery in the national economy. Because real interest rates are expected to come down only slowly during 1982, this year's national, and hence local, recovery will be on the slow side—slower than the short-lived recovery from the 1980 recession. Nevertheless, the recent surprisingly strong performance of the region in the face of adverse national economic conditions augurs well for the future.

Historically, national recessions have had a relatively moderate impact on the Mid-Atlantic states, with their low concentration of cyclically sensitive industries. However, there is nothing in recent history quite like the region's cyclical performance during 1981 (Chart 3). At least as measured by private payroll employment, the Mid-Atlantic region barely felt the national downturn. The recovery from the 1980 recession was also somewhat atypical: Cyclically insensitive regions are supposed to lag well behind the nation instead of tracking the U.S. expansion closely, as the Mid-Atlantic did from July, 1980 to July, 1981. A large part of the Mid-Atlantic's recent favorable cyclical performance can be explained by the surprisingly robust New York City economy. Three sectors, making up around 45 percent of New York City's employment base, did very well for a recession year: construction; finance, insurance and real estate; and services. The unusual strength in construction is nearly all in office, hotel and apartment building in Manhattan. In finance, the rapidly growing areas are commercial banking and securities and commodity brokerage. Manufacturing remains chronically weak in New York City and northeastern New Jersey, but appears to be holding up elsewhere in the region. The region's other major weakness is retail sales, especially in New York City where a drop in foreign tourism during the second half of 1981 apparently cut heavily into sales.

Another major reason for the Mid-Atlantic region's comparatively good cyclical performance is the reversal during the past five years of the region's decade-long secular decline. Basically, this reflects the gradual working off of the many excesses that built up during the 1960's. Chief among these were unrealistically high labor costs and tax burdens (in New York) that reduced the ability of the Mid-Atlantic region to compete successfully with other U.S. regions. Wage rates continue to rise more slowly in the region than in the rest of the country, and the tax burden in New York State is still coming down. The region's inflation advantage, which narrowed

Chart 3: Employees on Private Payrolls

(Seasonally adjusted)



considerably from 2 percentage points to around 1/2 point last year, has begun to widen again. To be sure, structural problems remain: The region is still probably losing population, and some of its manufacturing base and much of its infrastructure are antiquated. However, the major structural problems that severely restrained the Mid-Atlantic economy during most of the 1970's will be much less of a drag during the upcoming recovery and expansion.

A final set of factors likely to have an impact on the Mid-Atlantic economy over the next several years is the Administration's economic policy. While it is not possible to derive precise numerical estimates of the impact of the various federal tax and spending policies that have been enacted and proposed, we can make some rough approximations of the relative impact. That is, it is possible to determine whether a region will fare better, about the same as, or worse than the rest of the country under the Administrations program. An obvious example is that states having a relatively large concentration of defense industries will benefit disproportionately from the defense spending element in government policy.

Because the personal tax cuts will benefit individuals in the higher tax brackets relatively more than those in the lower brackets, the higher the average taxable income of a region, the greater the tax benefit. Thus, the Mid-Atlantic region, especially New Jersey, will experience an above-average gain because per capita personal income is above the U.S. average (Table 5). On the other hand, cuts in social programs will have an above-average negative impact on regions with relatively large dependent populations, and the Mid-Atlantic region is also in this category. During 1979 and 1980, per capita transfer payments—a rough measure of dependency—were above the U.S. average. On balance, though, the personal tax cuts appear to slightly outweigh the spending cuts in the Mid-Atlantic region.

The potential impact on business in the region is also a mixed bag. In terms of value of prime defense contracts awarded in 1981, New York ranks third behind California and Texas. However, it is a distant third, and New York is actually slightly below the U.S. average on a per capita basis. Less of a help for the region are the business tax cuts that are aimed at newer manufacturing firms as opposed to the older manufacturing and the finance and service firms that predominate in the Mid-Atlantic region. However, the region has an above-average share of capital goods producers and should benefit from any stimulus to capital expansion nationally.

Finally, Mid-Atlantic state and local governments will be hurt by the spending cuts, but probably not much more than average. Also, except for federally mandated programs, the states and localities are not under any legal obligation to make up the cuts from their own revenues. However, because per capita outlays for social programs in New York are well above the U.S. average, the state may be under more political pressure than most state governments to pick up some of the cuts. New York, New Jersey, and New York City face the additional problem of having their corporate tax base tied to the federal base, so that all of the federal corporate tax cuts automatically lower state and local tax receipts.

In summary, the Mid-Atlantic region should experience a moderate economic expansion over the next two years, with perhaps one or two quarters of interrupted growth resulting from the Federal Reserve overstaying its policy of tight money. The relative absence of consumer durables and other interest-sensitive manufacturing in the region is a definite plus for the current business cycle. The trend forces, such as local wage and tax burdens, will exert less of a drag on the

Table 5: Relative Per Capita Personal Income, Transfer Payments and Defense Contracts—Mid-Atlantic as Percent of U.S. Average

	1979	1980	1981
Per Capita Personal Income			
Mid-Atlantic	108.1	110.3	111.3
New York	106.1	108.1	109.5
New Jersey	113.1	115.4	115.5
Per Capita Transfer Payments to Civilians			
Mid-Atlantic	103.5	118.3	n.a.
New York	107.0	121.9	n.a.
New Jersey	95.2	110.0	n.a.
Per Capita Prime Defense Contracts			
Mid-Atlantic	98.7	98.6	94.3
N.Y.	110.7	110.3	99.0
N.J.	70.0	70.6	83.3

region than in the past. However, continued population loss will be a problem. Despite all the local concern, "Reaganomics" will probably have a neutral impact on the Mid-Atlantic economy, which is not to deny that some groups and organizations will be affected more than others.

The Southeast

Donald E. Bedwell[6]
Federal Reserve Bank of Atlanta

Even if the national recession seems less foreboding in the burgeoning Southeast than across the nation, it still spells lingering trouble in 1982. Prospects look encouraging for the stirrings of a modest recovery by late 1982. The recovery gives little indication of being a vigorous one, however. The Southeast should benefit from its orientation toward service industries, and toward light rather than heavy manufacturing.

The relatively service-oriented economies of Florida and Georgia showed resistence to the national slowdown both in 1980 and in early 1981. Both states, however, began to feel the squeeze late in 1981. Louisiana's petroleum industry also has given it a measure of protection against the slowdown, although the recession has afflicted many of its other industries, particularly in the northern portion of the state. Alabama, Mississippi and Tennessee have suffered with manufacturing-oriented economies. New plants under construction in Alabama and Tennessee could prove helpful in 1982 as could a planned World's Fair in Knoxville; Mississippi's economy cannot rebound until construction begins to strengthen, reviving the state's lumber and wood products industries.

Employment in the region promises to continue flat, or even down, because of widespread weakness in manufacturing and in the public sector, as most levels of government impose new budgetary restraints and the slack economy cuts revenue from sales and income taxes. Government hiring also will be limited by reductions in federal spending.

Homebuilders and other construction-related firms should begin a gradual turnaround by late 1982, if the trend toward lower inflation persists. The arrival of 1982 saw the three-year-old slump in residential construction spreading to other construction categories. Even construction's "nonbuilding" category—public projects such as highways, bridges and dams, plus private installations such as power plants—has faded as local and state governments joined commercial businesses in tightening their budget belts.

[6]This report is based on work by a number of staff members in the Bank's Economic Research Department.

Recession in the auto industry has meant cutbacks for auto assembly plants across the Southeast, and layoffs for ancillary firms that supply everything from tires to fanbelts. The auto slump has also hit textile firms that manufacture seat fabrics and auto carpeting. Textile manufacturers have also felt effects of the housing slowdown, and, furthermore, are competing against a deluge of imports, as the dollar's renewed strength has made foreign merchandise more competitive. Southeastern textile leaders hope that a cooling inflation rate and planned tax cuts will bring a turnaround for their industry later in 1982.

Airlines, major employers in the Southeast, find themselves in a crunch as business and pleasure travel continue in a tailspin. Truck lines similarly have felt the pinch. However, trucking executives report some difficulty in assessing the recession's impact, since it coincided with deregulation that opened their markets to new competitors.

Southeastern manufacturing industries should be given a shot in the arm by the Reagan Administration's tax cuts affecting business fixed investment—particularly in industries that can benefit from the liberalized tax credit for rehabilitation of aged factories. Those cuts should be a plus for the region, which depends heavily on its slow-growing nondurables manufacturing industries—textiles, apparel and food processing.

The Administration's emphasis on military spending also holds promise for the region in 1982. Some firms already have won substantial defense contracts while others are gearing up—in Florida, for instance, such firms as Martin Marietta, Honeywell and Harris. Defense constitutes Georgia's largest sector, and many federal programs throughout the Southeast are administered from the Atlanta area. Mississippi also should be a winner in the military contracting game, with greater defense expenditures through Ingalls Shipbuilding in Pascagoula, the state's largest industrial employer. This should also prove a profitable year for the mushrooming electrical equipment and supplies sector. High-technology firms of all kinds, in fact, are prospering.

Another bright spot is oil and gas exploration. The removal of price controls on petroleum is stimulating record drilling activity, and firms that make and repair oil field equipment and offshore platforms should continue to expand through 1982. Another plus for the region is the Tennessee-Tombigbee inland waterway,

which promises to put hundreds of workers on the job this year. When completed in 1986, it will enable barges to travel from Mobile to the Great Lakes, adding to Alabama's attractiveness for plant sites.

Tennessee will host the Knoxville World's Fair in 1982. If the dreams of its advocates come true, that fair will offset the depressing impact of the national slowdown and still-intimidating gasoline prices. Those high pump prices and the recession could actually bring more short-haul visitors to southeastern attractions from neighboring states. But the closer-to-home trend could prove to be bad for Florida, which traditionally has welcomed tourists from around the country and around the world. With Miami taking its lumps in the national press, another no-growth year seems likely for Florida tourism. On balance, upward momentum and an economy based on service industries should help Florida weather 1982 with strength—even if it will not breeze through as painlessly as it did in the 1980 slowdown. A depressed housing market and high interest rates threaten to stem the flow of northerners into the state, and overbuilding of multifamily projects in south Florida also could prove a drag. In Georgia, the Atlanta area is worrying over possible overbuilding as several office towers rise downtown. Unless the national economy picks up, some developers fear, the new construction—blueprinted when the market was booming—could produce a glut of space.

Southeastern farmers entered the new year reeling under a heavy burden of debt and high interest costs after back-to-back years of drought and disappointing prices. An early January freeze dealt another surprise blow to Florida's citrus industry, still recuperating from a similar cold wave early in 1981. Even through farmers in the region fared better generally last year than in 1980, they wound up with losses that were particularly bitter because the outlook had appeared so hopeful at the beginning of the year.

For farmers' fortunes to improve in 1982, favorable weather must allow them to increase output, and prices must advance from 1981's depressed levels. This would allow producers to begin paying off their debt. Without that, the region could see financial failures multiply. The Farmers Home Administration, lender of last resort for farmers, already is carrying a heavy loan portfolio resulting from a series of painful setbacks since 1977, when some states experienced severe drought. The cattle industry, the Southeast's second largest farm income earner, proved to be another losing enterprise in 1981. Even with an appreciable expansion of the calf crop, cattlemen's returns skidded sharply lower because of a major decline in prices and rising feed costs.

Coal recently has emerged as a fast-growing U.S. export, and coal exports from Louisiana, Alabama and Georgia could well become a major trade event of 1982. The expected completion of the Tennessee-Tombigbee Waterway in the latter half of the decade and, longer term, the possible deepening of channels at the Ports of New Orleans and Mobile could allow coal exports to soar. Grain and soybean exports, on the other hand, may not expand as rapidly in 1982 as in recent years because of increased harvests elsewhere in the world and the strong exchange value of the dollar. Florida exports tapered off ominously late last year, even out of Miami, which has grown enormously as an exporter of a variety of products.

The Southeast's rising international trade with Latin, Asian and African markets has been accompanied by rapid growth of international financial activity. Miami and Atlanta have been centers of that growth, expected to continue in 1982. An important new development is the authorization in December 1981 of International Banking Facilities. With such a facility, domestic banks can borrow funds from foreigners, free from the reserve requirements that cover domestic deposits, and lend to foreigners at world interest rates. A significant volume of international financial transactions formerly booked in offshore branches of U.S. and foreign banks is likely to come "home" to mainland offices this year.

"America's Breadbasket"

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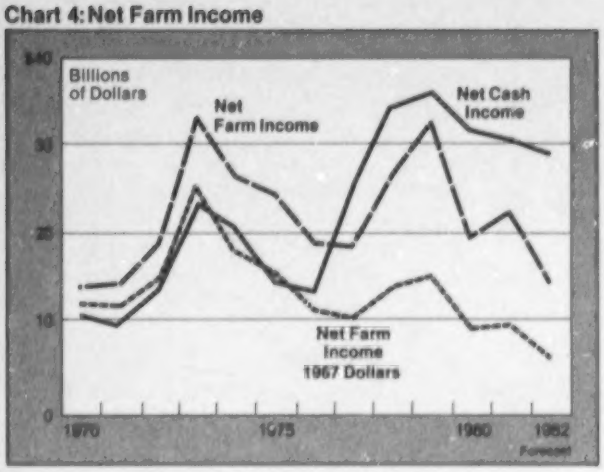
Marvin R. Duncan

Although 1981 began with some optimism over prospects for stronger farm product prices, that optimism proved to be largely unfounded. World food supplies were reduced to the lowest levels since the world

[1]The views expressed are solely those of the author and do not necessarily represent the view of the Federal Reserve Bank of Kansas City or the Federal Reserve System.

Chart 4: Net Farm Income



food crisis of the early 1970's, prospects for crop production appeared more tentative than usual, and higher livestock prices appeared likely, as well. Thus, farmers were poised for recovery from the disappointing income level of 1980. Net farm income of $19.9 billion in 1980 was down 39 percent from 1979 (Chart 4). Instead, farmers experienced the adverse price impact of large supplies for some crop commodities. But more importantly, there was a substantial drag on farm income in 1981 because of sluggish demand for farm products—due to the weakness of both the U.S. economy and the economies of its trading partners. As a result, the Index of Prices Received by Farmers declined throughout the year.

Excellent growing conditions and a large planted acreage in 1981 resulted in record U.S. production of wheat (2.8 billion bushels), corn (8.2 billion bushels), and cotton (15.7 million bales). Soybean output (2 billion bushels) was the second largest on record. Meat production was up about 1 percent from year-earlier levels, as higher beef and poultry production more than made up for somewhat lower pork output. The high levels of output coupled with sluggish demand growth held the increase in cash receipts from farm marketing during 1981 to about 4.6 percent. Direct government payments to farmers increased by about $600 million over 1980 levels. But cash production expenses, up 8.6 percent from a year earlier, more than offset increases in cash income. Thus, *net cash* income declined for the second year in a row—to $30.9 billion. *Net farm* income, an increasingly unreliable measure of farmer welfare, increased by $3.1 billion but only to $23.0 billion—the result of higher inventory levels for major farm products.

Adding to the discouraging farm income situation, the real value of farm equity declined for the second year in a row as farm asset values increased by less than the prevailing rate of price inflation. During the fourth quarter of 1981, land values declined in current dollars across the Breadbasket.

The outlook for 1982 is one of continued weakness in farm product prices. Weakness in farm product prices has tempered food price increases. Retail food prices increased 7.8 percent in 1981—less than the Consumer Price Index for the sixth time in seven years. Food prices are expected to increase between 5 and 9 percent in 1982, most likely in the middle of that range.

Farm product price movements during 1982 will be heavily dependent on both domestic and export product demand and on production levels. Demand will be determined by the performance of the U.S. economy and those of its trading partners. The U.S. economy is expected to begin recovery from recession during the second half of the year, and industrialized western countries are also expected to show positive economic growth later this year. Thus, traditional markets for U.S. farm products may strengthen by yearend. Less certain is the level of U.S. farm export sales to the centrally planned economies. The current deep chill on relations with the U.S.S.R. and the shaky financial condition of many Eastern European countries do not bode well for growth in farm exports to these countries. On balance, the value of U.S. export sales is expected to dip this fiscal year to about $42.5 billion, even though export volume may increase modestly.

Carryover stocks of major crop commodities at the end of the current crop marketing year will be large. However, since most of the carryover grain will be tied up in the Farmer Owned Reserve or in Commodity Credit Corporation inventory, free market stocks will be rather tight. On the other hand, it is likely that planted acreage in 1982 will be large, despite an acreage set-aside program for food and feed grains and for cotton. Without greater inducements to farmers to take part in the government's program, it is unlikely that participation will be sufficient to reduce 1982 crop production substantially. Consequently, strength in crop prices will be even more heavily dependent upon stronger domestic and export demand.

U.S. livestock production in 1982 is expected to be about as large as in the previous year, but the mix will change. Beef and poultry production are expected to increase slightly, while pork output may be off by as much as 7 to 10 percent. Both hog producers and cattle feeders, after many months of losses, may expect to turn narrow profits in 1982—primarily because feed grain and protein supplement prices, as well as the prices of replacement cattle and feeder pigs, have been bid down to levels that permit profitable production. Livestock prices should also respond to stronger demand, as the U.S. economy begins to register positive growth.

Nevertheless, farm income levels in 1982 will be disappointing for the third year in a row. Cash receipts from farm marketing are expected to increase only modestly, and the level of government payments to

farmers will be close to that of 1981. Thus, gross farm income may climb by only 1 to 4 percent. However, farm production expenses are expected to rise by 3 to 6 percent. As a result, farm income (before inventory adjustment) may decline to the $14-$17 billion range. Two years of depressed farm income and the prospect of a third have caused farmers to use agricultural credit more cautiously. Meanwhile, fund availability at agricultural banks, and at commercial banks across the Breadbasket, has improved. With an average loan-to-deposit ratio at Tenth Federal Reserve District agricultural banks of 58.8 percent and with about 57 percent of reporting banks desiring a higher ratio, credit availability should not be a problem for bank customers this Spring, nor should it be a constraint at Farm Credit System outlets. However, for those farmers who do not qualify for credit on normal commercial terms, credit availability from government sources is expected to be significantly reduced from past years. Thus, they face the prospect of refinancing farm real estate, selling capital assets, or obtaining Farmers Home Administration loans from a more limited supply of funds.

While demand for credit at agricultural banks has been weak, a steady infusion of credit from the Commodity Credit Corporation (CCC) since mid-1981 has provided an important boost to farmers' cash flow. At the end of February, outstanding CCC commodity loans totaled $11 billion, with about two-thirds of that lending occurring since September 30, 1981. Additionally, farmers have received about $1.5 billion in deficiency payments and in storage payments on grain in the Farmer Owned Reserve over the past few months.

In summary, the U.S. farm sector will experience depressed economic conditions in 1982, for the third year in a row. Farm income may decline to the $14-$17 billion range, and this will result in substantial financial pressures and some increase in the turnover of farm operatorship and ownership. If farm prices and income recover by 1983, the farm sector will suffer little lasting damage. Recovery in the farm sector is likely to be led by higher livestock prices. Finally, farm real estate prices, although registering decline during 1981 and 1982, can be expected to firm up with the onset of recovery from the current farm recession.

The Southwest

James A. Byrd
InterFirst Corporation

James A. Byrd

The Southwest continued to feel some of the negative effects of the national recession as this year began. But, even so, the "downers" in the region—in residential construction, in big-ticket consumer durables, and in domestic auto sales—have continued to be only about half as bad as those in the comparable national magnitudes, and only a small fraction of the severe downturns that have occurred in some other regions around the nation.

Unemployment rates in the four states of the Southwest increased between January, 1981 and January, 1982 (Table 6). In Texas and in Oklahoma, the increases were not very significant, and their unemployment rates remained significantly below the national average. The economies of both states continued .o benefit in 1981 from accelerated onshore and offshore oil and gas drilling and exploration activity. Oil production from old wells continued to decline, but this produced only slightly reduced royalty income for individuals and companies and reduced severance tax income for state governments. It had very little effect on "oil patch" activities which have been booming in recent years. However, the count of active drilling rigs topped out recently and may be turning down soon. Last year's frenetic pace just cannot be sustained.

Larger increases in unemployment rates (above the national rate) for Arkansas and for Louisiana indicate weakened national and regional demands for furniture, fixtures, equipment and lumber products in the case of Arkansas, and continued downward adjustments at old oil refineries and related facilities in the case of Louisiana. No significant changes in these industry groups are now expected in 1982. Turnarounds will be modest at best this year. Conditions in the Arkansas

Table 6: Unemployment Rates (Not Seasonally Adjusted)

	January 1981	January 1982
Texas	5.6%	5.9%
Oklahoma	4.4	4.9
Arkansas	9.8	12.6
Louisiana	8.7	10.0

agricultural sector also provided a major drag on net farm income in 1981 and are not expected to improve much this year.

Nonresidential construction activity continues to be weak in some Southwest metropolitan areas and has continued to be very strong in others. Office-building construction—both downtown and outlying—continues to boom in Houston, Dallas, Fort Worth, and San Antonio. Some slowdown from last year's fast pace of start-ups seems inevitable in those areas, beginning later this year. However, the volume of existing construction activity will prevent any actual turndowns over the next year or so.

The disinflation that has been occurring nationwide over the last year has also been occurring in the Southwest. Rates of price increase in the region that had outpaced the national rates of increase a bit over the last two years (principally because of starting-base calculations) are expected to about match the slower rate of change expected for the nation this year and next. The overall cost of living for most Southwest families still remains well below the national average. The absence of state income taxes also provides a more favorable income margin.

Major weaknesses in the Southwest thus far have occurred in the agricultural sector of the four states. Farm and ranch incomes are still an important base in the region and spawn an unappreciated volume of related agribusiness activities. Key grains and red meats are important crops here. The current outlook for 1982 conditions is not at all encouraging.

Units of state and local government in the Southwest will be experiencing reductions in the volume of federal dollars received in this and future years. While they are not nearly as dependent on these dollars as many governmental units in several other regions, these units will now be required to cut back somewhat on spending budgets—to shift at least from a go-go to a go-slow philosophy.

Financial institutions in the Southwest have been subjected to the same interest rate levels and margin pressures as those in other regions during the past year. They will continue to be so subjected in 1982. But loan volumes and deposit totals have been growing much faster than the national averages and those of most regions during the last few years. This asset and liability growth has mirrored a strong economic base performance, and is expected to continue to do so this year.

The Mountains

Tucker Hart Adams
United Banks of Colorado

Tucker Hart Adams

After a decade of pointing smugly to the Mountain region's rapid growth and its insulation from the swings of the business cycle, the unthinkable question is rearing its ugly head: "Do falling energy prices mean an end to the energy boom which has fueled growth in the Mountain region?" Falling oil prices, in combination with problems in the high-technology sector and declining government employment, introduce an element of doubt as to the validity of the usual rosy forecast for the region.

The eight-state Mountain region is a sparsely populated area of the United States (only 13 people per square mile, compared with 15 times that density in the northeast), which has been growing rapidly for the last 30 years. It grew substantially faster than the national average in the 1960's, and was the fastest growing region in the country during the 1970's. The Census Bureau projects that seven of the ten fastest growing states in the nation during the 1980's will be Mountain region states.

In addition to being a lively growth area, the Mountain region also has enjoyed a stable economy. Since 1975, its unemployment rate has been below the national average, with Wyoming often having the lowest unemployment rate in the nation.

Business failures during the last decade provide still another measure of stability. The Mountain region has had one of the two lowest failure rates in the United States except in 1975, when a sharp increase in failures in Arizona put the region in the third lowest slot. In mid-1981, when failures nationally had increased by 44 percent, Mountain region failures were up only 32 percent and had actually declined in Idaho, Colorado, New Mexico and Arizona.

Three factors account for the region's historic stability: (1) the size and composition of the cyclical manufacturing sector; (2) the relative immunity of the important energy sector from the business cycle; (3) the presence of a large government sector.

Manufacturing provides only 13 percent of the region's

income; nationally, that figure is 26 percent. High technology is an important component of this sector in Colorado, Arizona, New Mexico, Utah and Idaho. In some of the major cities, it provides up to 80 percent of the manufacturing jobs.

The importance of the energy sector is difficult to quantify, given the way employment and income data are collected. Direct employment in mining provides more than 5 percent of the region's income, three times the national average, but this is only the tip of the iceberg. In Denver, the region's largest city, the energy industry, directly and indirectly, provides 21 percent of the jobs, leases over 50 percent of the downtown office space, and accounted for 26 percent of the job growth in the past decade. The Mountain region contains 8 percent of the country's oil and gas reserves, more than 40 percent of its coal, and approximately 90 percent of uranium and oil shale reserves. Oil price shocks, which helped plunge the nation into recession in 1973 and 1980, accelerated economic expansion in much of the Mountain region.

The government sector accounts for 19 percent of the region's income, compared with 16 percent nationally. Both a heavy military concentration and the presence of regional headquarters for many federal agencies in Denver and Salt Lake City have helped stabilize the economy in the face of cyclical declines.

The very factors that provided growth and stability for the Mountain region in the 1970's could have the opposite impact in the current forecast period. Government employment is declining in the face of cutbacks in federal, state and local programs and will continue to shrink if the Administration's philosophy of a larger role for the private sector prevails. Fortunately, the region is less dependent on federal grants than the nation ($410 per capita relative to a national average of $419), so it will be somewhat sheltered from the cuts in aid to state and local governments.

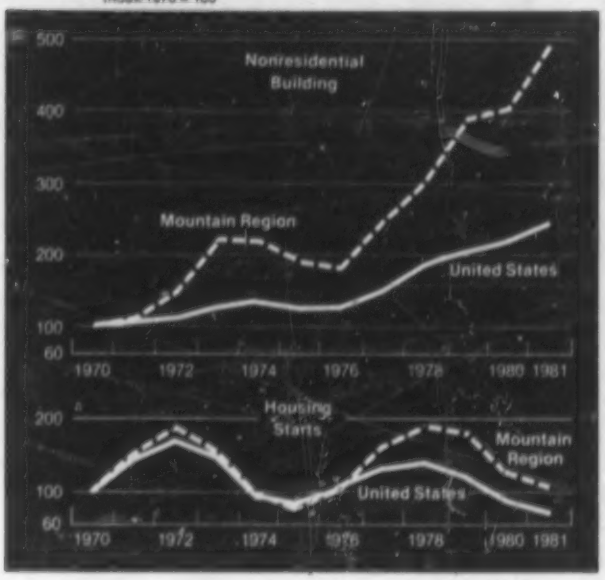
High-technology industry is facing lower earnings as recession-reduced demand, foreign competition, and price slashing squeeze profit margins. Expansion plans have been put on hold and actual layoffs are occuring in some areas, although the brunt of the employment cutbacks has been outside the Mountain region. At best, recovery is not expected until 1983, so little stimulus to growth is expected from high-technology expansion in 1982.

Table 7: Mountain Region Economic Indicators

		Forecast		Percent Change		
	1981	1982	1983	1981	1982	1983
Personal income (billion $)	115.9*	126.7	141.9	13.1	9.3	12.0
Retail Trade (billion $)	56.9*	63.0	71.0	13.6	10.7	12.7
Unemployment (%)	6.3	7.0	6.5	—	—	—
Housing (thousand units)	102.2	106.3	127.5	12.2	4.0	20.0
Nonresidential building (billion $)	4.6	3.4	3.6	24.1	26.0	6.0

*estimated

Chart 5: Construction Activity in Mountain Region and United States



The crucial variable in the 1982-1983 forecast is oil price. The uranium industry is basically shut down, the marginal oil shale projects have been postponed indefinitely, coal output is not forecast to expand for several years, and many of the nonenergy minerals (such as copper, molybdenum and zinc) are severely depressed. However, until recently, oil and gas exploration and development, particularly in the Overthrust Belt, were expected to continue setting new records. If oil prices stabilize at about $28 per barrel (considered by many to be the optimal price from Saudi Arabia's viewpoint) and high technology begins to recover later this year, then Mountain growth in 1982 will parallel the national recovery. Unemployment will average above 6 percent, still well below the national rate, but employment growth will be sluggish by historic standards. Housing construction will continue to be depressed by high mortgage rates and affordability problems, although pent-up demand will help the region outperform the nation. Nonresidential construction will drop sharply (albeit from exceedingly high levels) as the demand of energy firms for additional space evaporates.

The outlook for 1983 is even more clouded, since political decisions will determine national economic performance and energy prices will dictate which side of that growth path the Mountain region follows. The most

likely scenario is that the difficult decisions will be made, resulting in continued inflation improvement and gradually declining interest rates. Tax cuts and rising employment will stimulate consumer spending, which will in turn stimulate business investment. Unless oil prices continue to decline, the Mountain region will benefit from the strong general recovery.

Looking out beyond the near term, it is difficult to envision any scenario in which the region does not outperform the nation. With its broad base of energy reserves, the ideal climate of its major population centers, recreational opportunities, low unionization, and attractive tax rates, the region is well positioned to continue to grow.

The Pacific

Joseph A. Wahed
Wells Fargo Bank, N.A.

Joseph A. Wahed

Business conditions continue to weaken in the Pacific region as the recession's impact spreads to a broader group of industries and to a growing number of communities. This slump, which is really an extension of the one we had in 1980, would have been far worse were it not for the strength in defense spending and in selected specialized service activities. Hardest hit among the industries are, of course, housing, lumber, thrift institutions, and durables manufacturing, but the recession is sparing virtually no one. The unemployment rate is highest in the lumber regions of Oregon, Washington and Northern California—in many cases exceeding 25 percent of the work force. Job growth in other industries is very disappointing, as most are facing declining sales, bulging inventories, and narrowing profit margins. The recession is being made worse by the financial strains in the economy as reflected in the extraordinary level of interest rates and the squeeze on profits. State and local governments in the Pacific region are also feeling the recession and are having to tighten their capital spending plans as well as their hiring policies.

The Pacific region, as defined here, includes California, Oregon, Washington, Alaska and Hawaii and accounts for roughly 15 percent of the U.S. economy. It has a population of around 32 million, an employment level of over 14 million, and personal income of $380 billion. California dominates the region, amounting for roughly 75 percent of its business activity. The region's economic structure is heavily tilted toward the fast-growing industries of the future—aerospace, electronics, high-technology research, specialized agriculture, foreign trade, and a variety of business and consumer services. These and other factors made the region a leader in economic growth during the last several decades. Economic growth goes in cycles, and the Pacific region is hardly ever immune from severe national recessions or from international shocks. The degree of slowdown, however, often differs. At present, the recession in the Pacific region is not quite as bad as elsewhere, but it is severe and a comparison with the nation would only be a false attempt to make the region "look better."

The immediate prospects are poor. Recovery may take place later in 1982 but it will be weak and spotty. This is largely due to the record level of interest rates and to the highly uncertain financial environment nationally. At best, a bona fide recovery is doubtful before 1983.

One of the industries deeply affected by the recession is housing. It is not an exaggeration to call it a depressed industry, particularly in California. Further declines are expected as builders and lenders both withdraw from the housing market. Demand may be strong, but *effective* demand is being hurt by a combination of factors. For one thing, the prospects are not good for any significant decline in mortgage rates, which are now in the neighborhood of 16-18 percent. (California mortgage rates tend to be higher than elsewhere in the nation.) In addition, deposit flows into the region's financial institutions remain very disappointing. In effect, long-term financing is a rarity at present. Consumers, on their part, are still not quite sure which mortgage instrument to adopt, so there is a lot of holding back. Housing prices are, mercifully, easing under these forces but will have to fall further if any improvement in sales is to take place. The bottom line is that housing activity totaled only about 155,000 units in 1981—a 60 percent drop from the peak level reached in 1977. In 1982, our forecast indicates a level of just 125,000 homes. Housing-related industries such as lumber, hardware and to a lesser extent paper products, are also feeling the recession. In Washington, Oregon and Northern California, logging camps have closed and truck drivers, mill workers, and operators are out of work. In Oregon alone, about 22,000 workers are unemployed as a result of the depressed lumber industry.

In early 1982, the jobless rate in the heavy lumber areas of Northern California was 25 percent or more. Meanwhile, lumber shipments and orders continue to fall and prices remain soft.

In the region's important defense-aerospace-electronics markets, business trends are mixed. The worldwide recession has hurt the financially troubled airlines. Passenger and freight traffic is declining and new orders for commercial aircraft have fallen sharply. Lockheed Corporation in Burbank is phasing out its L-1011 program, while Boeing Corporation in Seattle has laid off 5,500 workers and stretched its production schedule. More layoffs are anticipated. In sharp contrast, rising defense contracts (especially in California) have resulted in near-boom conditions in this important industry. Procurement and research and development for missiles, aircraft, electronics and related defense equipment have substantially aided the economy of the Pacific region. Last year, nearly $20 billion in contracts were awarded to defense contractors in the region and more is expected in 1982, especially in California which is heavily involved in new strategic weapons. These include missiles (Cruise, Trident, MX), bombers (B1 and Stealth) and a variety of sophisticated electronics communications equipment. Electronics markets, especially for semiconductors, have not been spared during this recession. New orders for electronics equipment have softened as large corporations reduced their capital spending plans for 1982. Demand for office computers, on the other hand, is still fairly strong and leisure electronics equipment (video games, etc.) is also doing well.

Consumer markets in the Pacific region remain quite disappointing. As in other parts of the nation, big-ticket items such as cars, furniture and other household goods are not doing well. Retailers are reporting a reluctant and cautious consumer. It is clear that confidence levels (and of course, weak real incomes) are taking their toll on department stores and auto dealers. In California, the weakness in auto sales may come as a surprise because fully half of new car sales are foreign. Consumer markets will likely improve after midyear, when the tax cut takes effect and as the improvement in inflation finally starts sinking in. But the high unemployment and the uncertain financial environment will dampen the average consumer's enthusiasm.

Retail stores and restaurants are also feeling the pinch from the reduced flow of foreign and domestic tourism. The tourist industry is important in the heavily traveled regions of the west, especially Hawaii, San Francisco, Southern California, and parts of the northwest and Alaska. However, hotels reported lower occupancy rates for much of 1981 and early 1982. In Hawaii, the number of visitors has stabilized at just under 4 million and is expected to edge up very moderately in 1982. Heavy marketing efforts, reduced airfares and the severe winter weather on the mainland have helped raise hotel occupancy rates and improve tourist activity in Hawaii; whether this can be sustained for the rest of 1982 and 1983 is uncertain.

Table 8: Selected Economic Indicators for the Pacific Region[a]

			Forecast	Percent Change	
	1980	1981	1982	1981	1982
Population (millions)	31.8	32.5	33.0	2.2	2
Personal income (billion $)	338	377	410	11.5	9
Employment (millions)	14.3	14.4	14.4	0.7	—
Unemployment (%)	6.7	7.7	9.4	—	—
Retail sales (billion $)	145	165	180	13.8	9
Nondurables	98	113	124	15.3	10
Durables	46	52	56	13.0	8
Farm output (billion $)	18.3	19.2	19.0	4.8	—
Housing (thousand units)	210	153	125	—26.2	—18
Defense contract awards (billion $)	17.2	19.7	23.0	14.5	17

[a]1981 figures partly estimated; 1982 forecasts by Economics Department, Wells Fargo Bank.

The Pacific region's farmers are facing difficult conditions. A combination of bumper crops, falling commodity prices, and high interest rates have put the squeeze on profit margins. In addition, the region's export markets have weakened as a result of the worldwide recession. Wheat prices in 1981 were at their lowest level in three years and cotton and bean prices have also fallen sharply. The med-fly quarantine also increased production costs and disrupted domestic and international markets. Prospects for the rest of 1982 and into 1983 are mixed at best. The region's important beef industry is facing tremendous uncertainty because of shifting consumer demand to cheaper forms of protein such as chicken, turkey, fish and beans. Changing consumer tastes, however, are aiding those food processors specializing in ethnic and health foods such as vegetables, fruits and low-calorie items. In 1982, net farm income in the Pacific region will likely decline again as a result of these conflicting forces.

Business conditions will continue quite poor for much of this year in the Pacific region. Hopes for a recovery rest essentially on a sharp decline in interest rates (which is unlikely unless the budget deficit is trimmed) and the stimulative effects of the nationwide tax cut expected in July. Meanwhile, the continued progress in reducing inflation, as well as the liquidation of unwanted inventories, should set the stage for some improvement as we get closer to 1983.

9/20/82 R4105-29.12 1

Research Bulletin

Corporate Debt: Changing Perceptions of Financial Risk

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The Conference Board

mber 120

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Financial Risk and the Quality of Credit

THE COMBINATION of high interest rates and recessionary conditions in many industries during recent months has forcefully demonstrated the uncomfortable reality of financial risk to many corporate borrowers. Spectacular examples of actual or near default of debt obligations by large corporations have appeared with distressing frequency in the news media. And some observers believe there are many other firms that are edging dangerously close to the default stage.

For many years, conventional wisdom in corporate financing circles has held that it is beneficial for some portion of a corporation's capital structure to be in the form of debt. The reasoning underlying this contention is that a company can advance the economic well-being of its stockholders by borrowing part of the funds it needs, investing these funds in the business, and earning a rate of return that exceeds the carrying costs of the debt. This principle is commonly referred to as "leverage."

Federal income tax laws have encouraged the use of leverage by permitting corporate taxpayers to claim a deduction for interest payments on their annual income tax returns, thus effectively reducing the cost of borrowing. In contrast, dividend distributions to stockholders are not recognized as deductions for income tax purposes. Consequently, it is a relatively rare thing to find a major publicly owned U.S. corporation with a debt-free balance sheet.

In the days when the economic climate was happier than it is at present, most large corporations experienced little difficulty in managing their debt loads. When interest rates fluctuated within a rather narrow range, maturing issues of debt securities could usually be refinanced without too much upset. Since the onset of the present unprecedented high rates, however, refinancing has caused severe strains for many borrowers.

These high interest rates, combined with a weak stock market, have also discouraged company financial officers from long-term financing, leading some of them to violate one of the basic tenets of conservative financial management by financing long-term investments with short-term debts. When their businesses suffered severe recessionary downturns, combined with sharply rising costs in an inflationary environment, some of these companies found themselves hard-pressed to manage their debt burdens.

Objectives of this Study

The circumstances described above have heightened the concerns of many people that the degree of financial risk to which U.S. corporations are exposed has markedly increased in recent years, and that this trend is likely to continue. As a result, they fear, the quality of business credit in the U.S. economy is deteriorating. Others, who do not share this concern, contend that conventional measurements of liquidity and solvency have lost some of their validity because of inflation. They further believe that financial managers in large corporations are now generally much better equipped to manage financial risks with smaller margins of safety than they were only a few years ago.

The purposes of this project are to examine changing perceptions of financial risk on the part of three groups that are deeply concerned with its effects—credit-rating agencies, investment bankers, and corporate financial executives—and to describe the measures taken by company managements to adapt to changing conditions of financial risk.

Quantitative Measures of Financial Risk

Financial analysts have developed a number of ratios and other quantitative methods that can give a pretty good indication of the degree of financial risk that companies are exposed to. Comparisons of these measurements, over a period of time, can indicate whether a firm's position is improving or deteriorating. And comparisons with other companies or with industry averages can also reveal significant information.

Five types of ratios are frequently used (see box on page 4). These include liquidity ratios that assess a firm's ability to meet its current debt-payment requirements. Examples of frequently used liquidity ratios

Financial Risk vs. Credit Risk

Sometimes there is confusion over the meaning of the terms "financial risk" and "credit risk." *Financial risk* is the risk a company assumes when it borrows funds and exposes itself to mandated debt-service payments. *Credit risk* refers to the exposure assumed by the lender when funds are advanced to a corporate borrower, and there is some possibility of default by the borrower. The degrees of financial risk and credit risk are a function of the size of the debt burden assumed by the borrower and the extent to which corporate cash flows cover interest and principal repayments.

Financial risk is a variable that corporate management must control in order to safeguard the future financial viability of the enterprise. It is simply the exposure that a borrowing company accepts when it commits itself to a contractual liability for interest payments on the debts that it incurs, and to the repayment of the principal of these debts. The risk consists of the possibility that the company may not be able to live up to these obligations.

Credit risk is a problem for the lender or creditor, and is subject to various lender or investor actions—including credit analysis and evaluation, and diversification of loans and investments. Thus, financial risk and credit risk are two sides of the same coin—corporate debt quality.

Financial Ratios that Measure Certain Aspects of Financial Risk

Category	Ratio	How Calculated	Significance
I. Liquidity	Current ratio	$\frac{\text{Current Assets}}{\text{Current Liabilities}}$	Ability to pay interest and principal on debt
	Quick ratio (acid test)	$\frac{\text{CA - Inventory}}{\text{Current Liabilities}}$	More demanding measure of ability to pay on debt
	Working capital ratio	$\frac{\text{CA - CL}}{\text{Total Assets}}$	Measures net liquidity relative to size of firm
II. Cash-flow and Fixed-Charge Cover	Times interest earned	$\frac{\text{Pretax Profit + Interest Cost}}{\text{Interest Cost}}$	Margin of safety to cover interest expenses
	Fixed charge coverage	$\frac{\text{Income Available to Meet Fixed Charge}}{\text{Fixed Charges}}$	Broad measure of margin of safety to cover interest and other fixed charges
III. Asset Turnover	Inventory turnover	$\frac{\text{Sales}}{\text{Inventory}}$	Efficiency of inventory investment
	Average collection period	$\frac{\text{Receivables}}{\text{Sales per Day}}$	Efficiency of receivable management
	Fixed asset turnover	$\frac{\text{Sales}}{\text{Fixed Assets}}$	Efficiency of fixed asset investment
	Total asset turnover	$\frac{\text{Sales}}{\text{Total Assets}}$	Efficiency of total asset investment
IV. Profitability	Profit Margin	$\frac{\text{Net Profit after Tax}}{\text{Sales}}$	Effectiveness of management
	Return on assets	$\frac{\text{Net Profit after Tax}}{\text{Total Assets}}$	Overall managerial effectiveness
	Return on net worth	$\frac{\text{Net Profit after Tax}}{\text{Net Worth}}$	Return available to shareholders
V. Financial Leverage and Solvency	Debt to total assets	$\frac{\text{Total Debt}}{\text{Total Assets}}$	Overall measure of leverage
	Net worth to debt	$\frac{\text{Net Worth}}{\text{Total Debt}}$	Solvency protection afforded
	Debt as percent of capital funds	$\frac{\text{Long-Term Debt}}{\text{Capital Funds}}$	Use of debt to provide long-term funds

include the current ratio $\left(\frac{\text{current assets}}{\text{current liabilities}}\right)$, the quick ratio $\left(\frac{\text{current assets - inventory}}{\text{current liabilities}}\right)$, and working capital ratio $\left(\frac{\text{current assets - current liabilities}}{\text{total assets}}\right)$. Liquidity ratios generally compare short-term assets with short-term liabilities for the purpose of assessing the company's ability to discharge its maturing obligations by use of its existing liquid assets.

Cash-flow and fixed-charge coverage ratios compare cash flows with various debt-service payment requirements. A comfortable margin of cash flow relative to debt-service payments suggests a lower degree of financial risk. Examples of cash-flow and fixed-charge coverage ratios include times interest earned

$\left(\frac{\text{pretax profit + interest cost}}{\text{interest cost}}\right)$, and fixed-charge coverage $\left(\frac{\text{income available to meet fixed charges}}{\text{fixed charges}}\right)$.

Asset-turnover ratios attempt to measure the efficiency of use of corporate assets. The more efficiently corporate assets are used, the better able the corporation should be to maintain a high level of profit and, consequently, meet its financial obligations. Asset-turnover ratios include: inventory turnover $\left(\frac{\text{sales}}{\text{inventory}}\right)$, turnover of receivables $\left(\text{also measured as average collection period } \left[\frac{\text{receivables}}{\text{sales per day}}\right]\right)$, fixed-assets turnover $\left(\frac{\text{sales}}{\text{fixed assets}}\right)$, and total-assets turnover $\left(\frac{\text{sales}}{\text{total assets}}\right)$.

Profitability ratios reflect the ability of the corporation to generate cash flows available for debt-service payments. But, more importantly, they reflect on the quality of corporate management planning for—and realization of—profits. Profitability ratios include: profit margin on sales $\left(\frac{\text{net profit after tax}}{\text{sales}}\right)$, return on assets $\left(\frac{\text{net profit after tax}}{\text{total assets}}\right)$, and return on owners' equity $\left(\frac{\text{net profit after tax}}{\text{net worth}}\right)$.

Financial-leverage and solvency ratios indicate to what extent a corporation makes use of borrowed funds as compared with funds contributed by stockholders. In addition, these ratios point to the equity protection available to guard against financial risk from insolvency. Widely used financial-leverage and solvency ratios include: debt to total assets $\left(\frac{\text{total debt}}{\text{total assets}}\right)$, owners' equity to debt $\left(\frac{\text{net worth}}{\text{debt}}\right)$, and debt as a percent of capital funds $\left(\frac{\text{long-term debt}}{\text{capital funds}}\right)$.

Trends in Measurement of Financial Risk

As a preliminary indicator of changes in the degree of financial risk to which U.S. corporations are exposed, the *Quarterly Financial Reports* of the U.S. Federal Trade Commission (FTC) were consulted. The data on the current ratio and the ratio of stockholders' equity to debt were considered to be most revealing for purposes of this analysis.

The FTC series on the current ratio reflects a declining trend in liquidity among manufacturers, and a slight downtrend in liquidity in mining, retail and wholesale companies. Over the period 1970 to 1980, the current ratio in the manufacturing sector declined from 2.0 to 1.7.

Over the same period, companies reporting to the FTC increased their use of financial leverage. The FTC data indicate that the ratio of stockholders' equity to debt declined from 2.4 to 2.3 in manufacturing, from 1.7 to 1.3 in mining, from 1.4 to 1.2 in both retail trade and wholesale trade.

As a further indicator of trends in measurement of financial risk, a study was made of data in the annual reports of 200 randomly selected companies whose securities are traded on the New York Stock Exchange. Data were gathered concerning interest coverage for the period 1971 to 1981. The 200 companies represent a wide range of industry groups, and companies from all size categories were included in the sample. The distribution of companies by size category follows:

Annual Sales, 1981	*Number of Companies*
$5 billion and over	18
$1 billion - $5 billion	71
$750 million - $999 million	21
$500 million - $749 million	26
$250 million - $499 million	30
$100 million - $249 million	27
Under $100 million	7
	200

The following tabulation shows that, on balance, there was a decline in interest coverage among the 200 companies. Furthermore, this decline was more pronounced among the smaller companies. At the same time, there was an increase in interest expense as a percent of pretax income. The median for all companies increased from 19.5 percent in 1971 to 27.9 percent in 1981. There was an even more substantial increase in this median value among smaller companies.

Ten-Year Trend in Interest Coverage

	200 Companies	*64 Smaller Companies*
Number of companies with decline in interest coverage	119	38
Percent of companies	59%	71%
Interest expense as percent of pretax income—median of all companies 1981	27.9%	27.5%
1971	19.5%	15.9%

Leverage has become a more prominent feature in the financial strategy of the 200 companies studied. The incidence of debt increased over the ten-year period, as shown in the following tabulation. The ratio of long-term debt to capital funds increased from 25.0 percent in 1971 to 26.2 percent in 1981. Again, there was a more marked shift toward greater financial leverage among smaller companies.

Ten-Year Trend in Financial Leverage

	200 Companies	64 Smaller Companies
Number of companies with increase in leverage	103	30
Percent of companies	52%	57%
Long-term debt as percent of capital—median of all companies 1981	26.2%	28.3%
1971	25.0%	22.0%

A decline in liquidity, as represented by current ratios, was the most noticeable trend in the 200 companies whose annual report data were analyzed. The median current ratio declined from 2.6 in 1971 to 2.0 in 1981. In 1981, 108 of the 200 companies had a current ratio of 2.0 or less.

Ten-Year Trend in Liquidity, 1971 to 1981

	200 Companies	64 Smaller Companies
Companies whose current ratios declined:		
Number of companies	149	41
Percent	74%	77%
Median current ratios:		
1981	2.0	2.2
1971	2.6	2.8

In summary, a review of trends in financial ratios of the companies studied indicates a clear tendency toward lower liquidity, increased use of financial leverage, and a narrower margin of safety insofar as interest coverage is concerned. These trends suggest an upward shift in financial risk.

Perceptions of Financial Risk by Credit-Rating Agencies

THE SERVICES of credit-rating agencies are an important element in the operations of the nation's financial-markets system. Such well-known rating agencies as Duff and Phelps, Inc., Dun & Bradstreet, Inc., Fitch Investors Service, Inc., Moody's Investors Service, Inc., Standard & Poor's Corporation, and The Value Line Investment Survey provide continuing streams of statistical and other data on individual companies, as well as independent evaluations of the quality of debt issued by these companies.

At present, ratings are made and updated on close to 1,800 corporate bond issues and approximately 1,200 commercial paper issues. In addition, general credit ratings are available for over three million companies. The bond-rating agencies normally rate all issues of $5 million and over, with or without a request from the issuer. However, publication rights to the ratings rest with the issuer in some cases. Issues that generally are not rated without the request of the issuer include private placements, obligations of banks and bank-holding companies, obligations of brokerage houses, and bonds of non-U.S. corporations.

Credit ratings play an important role in U.S. financial markets. The size and diversity of borrowers and the types of debt instruments they offer make it necessary to have an impersonal credit judgment available to assist lenders and investors.

Credit ratings assist investors by providing simple indicators of credit quality. A rating is not a recommendation to buy or sell, nor does it mean that the rating agency has performed an audit. Moreover, a bond rating is not a general-purpose evaluation of an issuing corporation. Rather, a credit rating on a bond issue is restricted to that one issue, and may be higher or lower than other issues of the same company, depending on the specific protection given that class of bondholders. For example, an issuer with an AA obligation is not necessarily better than an issuer with a BB rating, since the AA rating may be based primarily on the specific security underlying one particular bond. Ratings perform the function of credit-risk evaluation, which is one element of the investment decision-making process. (See the boxes on page 7 for definitions of ratings used by two of the rating agencies.)

Rating of Bonds, Commercial Paper, and Trade Credit

In order to evaluate the changes in ratings of various types of corporate debt as they relate to financial risk and the general quality of credit, it is helpful to understand, in broad terms, how the rating agencies work. At the present time, at least four agencies publish ratings on corporate bonds. They are: Duff and Phelps, Inc., Fitch Investors Service, Inc., Moody's Investors Service, Inc., and Standard & Poor's Corporation. Two of them, Moody's and Standard & Poor's, provide ratings on corporate issues of commercial paper. Dun & Bradstreet, Inc., evaluates trade credit.

Corporate Bonds

Corporations planning to register a public-debt offering with the Securities and Exchange Commission generally will approach one or more of the rating agencies. The purpose of this contact is to get an indication of what the bond rating might be (for first-time issuers), or to ascertain the impact on existing bond ratings if the company should issue additional debt securities.

Once a formal meeting is scheduled between the issuing corporation and the rating agency, the issuing corporation provides the rating agency with detailed information concerning the financial and competitive position of the company. Generally, this information is

Moody's Investors Service, Inc.
Bond-Rating Definitions[1]

Key	New Moody's	Former Moody's
Best quality, smallest degree of risk	Aaa	Aaa
High quality, slightly more long-term risk than top rating	Aa1 Aa2 Aa3	Aa
Upper medium grade, possible impairment in the future	A1 A2 A3	A
Medium grade, lack outstanding investment characteristics	Baa1 Baa2 Baa3	Baa
Speculative issues, protection may be very moderate	Ba1 Ba2 Ba3	Ba
Very speculative, may have small assurance of interest and principal payments	B1 B2 B3	B
Issues in poor standing, may be in default	Caa	Caa
Speculative in a high degree, with marked shortcomings	Ca	Ca
Lowest quality, poor prospects of attaining real investment standing	C	C

[1]In April, 1982, Moody's Investors Service expanded its bond-rating categories to make them more precise. By adding numerical ratings of 1, 2 or 3 to its existing letter ratings of Aa, A, Baa, Ba and B, Moody's increased the number of possible ratings from 9 to 19.

embodied in several documents, including the prospectus and a specially prepared company presentation. Included in these presentations are a five-year historical operating record with financial statements, comparisons with similar companies, projections of future financial performance in the form of pro-forma balance sheet and income statements, and possible financing alternatives.

Upon receipt and a review of this information, the rating agency will appoint a committee to analyze the information, request any additional information required from the issuing company, and arrive at a rating. Key factors that influence industrial bond ratings are: an industry and company analysis, a detailed financial analysis of the issuing company, and examination of indenture provisions and legal aspects of the issue.

Standard & Poor's Corporation
Bond-Rating Definitions

Bond ratings are based, in varying degrees, on the following:

I. Likelihood of default—capacity and willingness of the obligor as to the timely payment of interest and repayment of principal in accordance with the terms of the obligation.

II. Nature of and provisions of the obligation.

III. Protection afforded by, and relative position of, the obligation in the event of bankruptcy, reorganization, or other arrangement under the laws of bankruptcy and other laws affecting creditors' rights.

AAA Bonds rated AAA have the highest rating assigned by Standard & Poor's to a debt obligation. Capacity to pay interest and repay principal is extremely strong.

AA Bonds rated AA have a very strong capacity to pay interest and repay principal and differ from the highest rated issues only in a small degree.

A Bonds rated A have a strong capacity to pay interest and repay principal, although they are somewhat more susceptible to the effects of changes in circumstances and economic conditions than bonds in higher rated categories.

BBB Bonds rated BBB are regarded as having an adequate capacity to pay interest and repay principal. Although they normally exhibit adequate protection parameters, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity to pay interest and repay principal for bonds in this category than for bonds in higher rated categories.

BB Bonds rated BB, B, CCC, and CC are regarded, on balance, as predominantly speculative with respect to capacity to pay interest and repay principal in
B accordance with the terms of the obligation. BB indicates the lowest degree of speculation and CC
CCC the highest degree of speculation. While such
CC bonds will likely have some quality and protective characteristics, these are outweighed by large uncertainties or major risk exposures to adverse conditions.

C The rating C is reserved for income bonds on which no interest is being paid.

D Bonds rated D are in default, and payments of interest and/or repayment of principal is in arrears.

The ratings from AA to BB may be modified by the addition of a plus or minus sign to show relative standing within the major rating categories.

Source: Standard & Poor's Corporation

Commercial Paper

The commercial-paper market has undergone dramatic growth. Since 1965, the number of issuers has increased from 450 to 1,200. Between 1965 and 1981, the volume of

Standard & Poor's Corporation
Commercial-Paper Rating Definitions

A commercial-paper rating is a current assessment of the likelihood of timely payment of debt having an original maturity of no more than 270 days. Ratings are graded into four categories, ranging from A for the highest quality obligations to D for the lowest. The four categories are:

A Issues assigned this highest rating are regarded as having the greatest capacity for timely payment. Issues in this category are further refined with the designation 1, 2 or 3 to indicate the relative degree of safety.

A-1 This designation indicates that the degree of safety regarding timely payment is very strong.

A-2 Capacity for timely payment on issues with this designation is strong. However, the relative degree of safety is not as overwhelming as for issues designated A-1.

A-3 Issues carrying this designation have a satisfactory capacity for timely payment. They are, however, somewhat more vulnerable to the adverse effects of changes in circumstances than obligations carrying the higher designations.

B Issues rated B are regarded as having only an adequate capacity for timely payment. However, such capacity may be damaged by changing conditions or short-term adversities.

C This is assigned to short-term debt obligations with a doubtful capacity for payment.

D This rating indicates that the issue is either in default or is expected to be in default upon maturity.

paper outstanding has increased from $15 billion to $160 billion.

The approaches used in arriving at ratings by the different rating agencies are similar. Commercial-paper ratings are based on an evaluation of the borrowing company's management, and on a detailed financial analysis. While the optimal balance sheet and income statement for an issuer depends on the industry and type of business involved, key requirements include adequate liquidity, an upward trend in earnings, and the ability to borrow to meet unexpected cash needs.

Each rating agency grades borrowers according to its own classification system. Moody's Investors Service, Inc. (Moody's) uses a P-1, P-2, and P-3 rating scale, with P-1 being the highest rating. Standard & Poor's Corporation (S&P) uses a slightly different classification system, which is outlined in the box above. Late in 1981, S&P modified its top category rating so that a subcategory of A-1+ is now used. At the time, S&P indicated that close to 500 companies qualified for the new rating.

A company must be in a strong financial condition to obtain an A rating from S&P, or a P (prime) rating from Moody's. Because investors in commercial paper tend to be very conservative, the market tends to be less receptive to issues rated A-3 and P-3. As an aftermath of the Penn Central crisis in 1970, the subsequent emphasis on commercial-paper ratings, and further possible distinctions between A-1 paper based on the issuing corporation's bond ratings, interest-rate tiering has developed in the market. This means that different issues will pay different interest rates within a given rating. The rating of commercial paper requires very specialized approaches because corporations from many different industry sectors now issue commercial paper.

While rating agencies may generally expect corporations to maintain bank credit lines equal to all commercial paper outstanding, there are exceptions to this rule. For example, some corporations use commercial paper strictly to finance seasonal needs, with commercial paper outstanding for only two to three months during the year. Also, in cases of exceptionally strong credits, borrowers may cut back bank lines to a percentage of peak commercial-paper borrowings.

Trade Credit

Dun & Bradstreet, Inc. (D&B) provides credit ratings for more than three million companies. These ratings are updated on a 60-day cycle basis. The D&B rating system follows the format of combined letter and numerical

Dun & Bradstreet, Inc.
Credit-Rating Classifications

Letters give capital rating and denote estimated financial strength of the business. The numbers stand for the composite credit appraisal of the business based upon information contained in the *Business Information Report.*

Estimated Financial Strength	*Composite Credit Appraisal*			
	High	*Good*	*Fair*	*Limited*
5A over $50 million	1	2	3	4
4A $10 million to $50 million	1	2	3	4
3A $1 million to $10 million	1	2	3	4
2A $750,000 to $1 million	1	2	3	4
1A $500,000 to $750,000	1	2	3	4
BA $300,000 to $500,000	1	2	3	4
BB $200,000 to $300,000	1	2	3	4
CB $125,000 to $200,000	1	2	3	4
CC $75,000 to $125,000	1	2	3	4
DC $50,000 to $75,000	1	2	3	4
DD $35,000 to $50,000	1	2	3	4
EE $20,000 to $35,000	1	2	3	4
FF $10,000 to $20,000	1	2	3	4
GG $5,000 to $10,000	1	2	3	4
HH up to $5,000	1	2	3	4

CreditWatch

CreditWatch highlights potential changes in ratings of bonds and other fixed income securities. It focuses on events and trends which place companies and government units under special surveillance by S&P's 120-member analytical staff. These may include mergers, voter referendums, actions by regulatory authorities or developments gleaned from analytical reviews. Unless otherwise noted, a rating decision will be made within 90 days. Issues appear on CreditWatch where an event, situation or deviation from trends occurred and needs to be evaluated as to its impact on credit ratings. A listing, however, does not mean a rating change is inevitable. Since S&P continuously monitors all of its ratings, CreditWatch is not intended to include all issues under review. Thus, rating changes will occur without issues appearing on CreditWatch.

ratings. The letter gives a capital rating and denotes the estimated financial strength of the business firm. The number stands for the composite credit appraisal of the business based upon information contained in the *Business Information Report* (published by D&B). The D&B ratings in use are reproduced in the box on page 8.

Factors used by D&B in arriving at composite credit ratings include the ability of the company to make debt payments promptly, financial position of the company, operating history, and prior experience of the company and principal officers in conducting business.

The information provided by Dun & Bradstreet, Inc., is used by firms that provide commercial credit to their customers, as well as by lenders seeking to obtain a better insight into the credit standing of potential borrowers.

Early Warning System

In November, 1981, Standard & Poor's Corporation introduced an "early warning" service to call attention to potential credit problems and the possibility of credit rating changes. In that month, S&P initiated publication of an early warning list of companies and governmental units whose bonds and short-term securities are under special surveillance. The list is titled *CreditWatch*, and is updated weekly.

CreditWatch was initiated in response to an increasing incidence of credit-rating changes of corporate bonds, brought on, in part, by rising interest rates and growing debt-service burdens. *CreditWatch* reflects growing investor concern over the creditworthiness of corporations and municipalities during a phase of the business cycle that has been accompanied by sharp swings in the economy and in interest rates, and by declining profitability of basic industries (steel and automobiles).

S&P notes that a *CreditWatch* listing does not necessarily mean a decline in the credit quality of a company's bonds. Some companies are listed where the potential credit implication is positive. Moreover, some companies are listed because of the possibilities of their entering into a merger. In such cases, the merger could impose increased demands on the acquired unit, or substantially change the degree of borrowing and financial leverage of the acquiring company.

Changes in Ratings as an Indicator of Financial Risk

Corporate credit quality has shown a decline in recent years, as evidenced by changes in bond and commercial-paper ratings. Rating changes on corporate bonds and commercial paper provide additional insight into possible changes in the level of financial risk. Table 1 was constructed by reviewing Moody's and Standard & Poor's publications in which bond and commercial-paper ratings and rating changes are published. The data in the table point clearly to an increase in financial risk over the period 1978 to 1981:

Table 1: Changes in Bond and Commercial-Paper Ratings

	Bond Rating Changes		Commercial-Paper Rating Changes		Total
Half-Year	Up	Down	Up	Down	Changes
1978 I	15	19	4	5	43
1978 II	11	8	3	5	27
1979 I	18	24	3	6	51
1979 II	17	18	5	7	47
1980 I	12	27	3	21	63
1980 II	25	38	6	13	82
1981 I	15	50	5	13	83
1981 II	26	32	8	19	85

(1) In all but one half-year, downward rating changes have exceeded upward rating changes.

(2) On an annual basis, there was a progressive increase in the overall number of rating changes in bonds and in commercial paper, over the period 1978 to 1981.

(3) The margin of annual downward changes over upward changes increased and reached a high for bonds in 1981 and for commercial paper in 1980.

Credit Losses and Business Failures as Indicators of Financial Risk

The incidence of credit loss is another indicator of a change in credit quality. Probably the most comprehensive series of data available in this area are those published by Dun & Bradstreet, Inc. The D&B series tends to confirm the slippage in credit quality noted previously.

The data on business failures include four series that broadly measure the credit strength or weakness of major sectors of business. These series include:

(1) Number of failures
(2) Total failure liabilities
(3) Failure rate per 10,000 listed concerns
(4) Average liability per failure

It should be noted that failures include those businesses that ceased operations following bankruptcy, foreclosure, receivership or reorganization (see the accompanying box). Failures do not represent total business discontinuances. A business may discontinue operations and pay creditors in full. In that case, the concern is not included in any of the business failures data.

Total failures liabilities include all accounts payable, notes payable, and other current liabilities. Long-term publicly held debt obligations are not included. Table 2 records various data on business failures and liabilities since 1969.

Definition of Business Failures and Their Liabilities

Business Failures include businesses that ceased operations following assignment or bankruptcy; ceased with loss to creditors after such actions as execution, foreclosure or attachment; voluntarily withdrew leaving unpaid obligations; were involved in court actions such as receivership, reorganization or arrangement; or voluntarily compromised with creditors.

Liabilities of Failures include current liabilities, and have a special meaning: They include all accounts and notes payable and all obligations, whether in secured form or not, known to be held by banks, officers, affiliated companies, supplying companies, or the government. Long-term publicly held obligations are not included, and offsetting assets are not taken into account.

D&B also publishes information on the causes of business failures. In the analysis covering failures during 1979, lack of experience and incompetence represented

Table 2: Record of Business Failures and Liabilities of Business Failures

Selected Years	*Number of Failures*	*Failure Liabilities ($ Million)*	*Failure Rate per 10,000 Listed Concerns*	*Average Liability per Failure*
1969	9,154	$1,142	37	$124,767
1971	10,326	1,916	42	185,641
1973	9,345	3,298	36	245,972
1975	11,432	4,380	43	383,150
1977	7,919	3,095	28	390,872
1978	6,619	2,656	24	401,270
1979	7,546	2,667	26	352,639
1980	11,742	4,635	42	394,740
1981[a]	7,883	2,989	57	379,200

[a]Reflects data for first half of year only
Source: Dun & Bradstreet, Inc.

Table 3: Causes of Business Failures—1979

Cause	*Manufacturers*	*Wholesalers*	*Industry Group: Retailers*	*Industry Group: Construction*	*Commercial Services*	*All*
Inadequate sales	49.9%	50.4%	56.7%	49.6%	46.6%	52%
Heavy operating expenses	37.8	31.6	23.0	31.6	31.7	29
Receivables difficulties	16.6	18.5	3.7	13.5	8.3	10
Inventory difficulties	7.4	13.6	14.4	1.3	1.6	9
Excessive fixed assets	4.4	1.5	3.0	2.0	4.7	3
Poor location	0.4	0.8	4.4	0.4	1.2	2
Competitive weakness	24.5	21.9	24.9	34.0	25.2	26
Other	2.0	2.0	1.6	1.7	1.6	2

Source: Dun & Bradstreet, Inc.

the largest percentage of causes of failures (96 percent). Those failures caused by lack of experience and incompetence were further explained by more detailed analysis (Table 3.) While none of the detailed explanations of causes of failures specifically points to excessive debt or debt-servicing costs, it is possible, nevertheless, to draw some inferences concerning the role of debt.

Excessive debt or debt-servicing costs can be associated with excessive investment in assets if additional investment in assets requires additional debt. There are three categories in the table on causes of failures that reflect excessive investment in assets. These include receivables difficulties (10 percent of firms that failed); inventory difficulties (9 percent); and excessive fixed assets (3 percent).

Excessive debt or debt-servicing costs can be associated with inadequate sales volumes that fail to generate cash flows sufficient to permit comfortable debt servicing. In 1979, 52 percent of all firms included in the analysis of causes of failures experienced inadequate sales.

Perceptions of Financial Risk by Corporate Executives

AS DEMONSTRATED in the preceding sections of this report, there has been a notable increase in the degree of financial risk to which the corporate sector is exposed. A shortcoming of the data that have been presented, however, is that they represent averages to a great extent. And, averages can be deceptive. To help in overcoming this drawback, and to gain some insights into the behavior of company managements in the face of increasing financial risk, a survey of 50 companies was conducted.

These 50 companies are included among the 200 companies whose financial ratios were used earlier in this report, in the analysis of trends in financial ratios. They are substantial in terms of resources, and have issued stocks and bonds that are listed and traded on the New York Stock Exchange. The majority of these companies are engaged in manufacturing (Chart 1), and, among these, durable goods manufacturers (24 companies) outnumber nondurable goods manufacturers (19 companies). All size categories are represented (Chart 2), although companies with sales in excess of $500 million account for 34 of the 50 companies. Twenty-one companies have obtained funds by sales of bonds during the past two fiscal years. The median amount of bond financing was $100 million.

Chart 1: Industry Classification of 50 Surveyed Companies

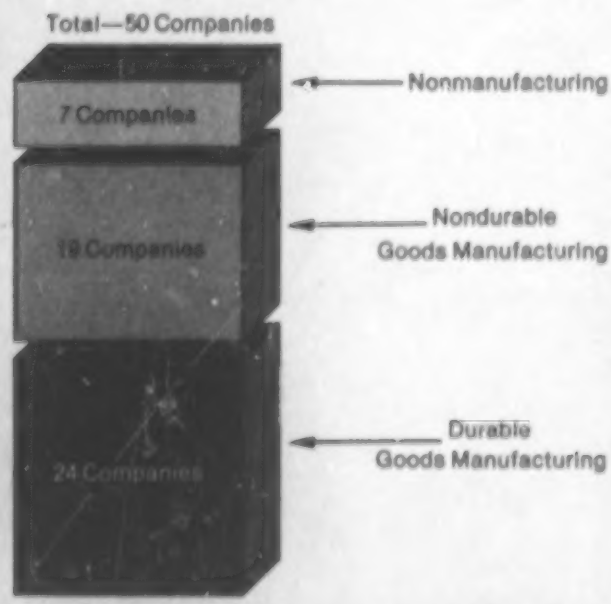

Chart 2: Classification of 50 Surveyed Companies, Based on Annual Sales

Recent Increases in Financial Risk

Financial executives of the participating companies were asked to indicate whether they believed that their

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exposure to financial risk increased, decreased or remained the same during the period 1979 to 1981. Twenty-seven responded that financial risk had increased, eight said it had decreased, and fourteen indicated that financial risk had remained about the same. (One did not reply to this question.)

The eight companies that perceived a reduction in financial risk represent a cross section of industries, and range in size from approximately $100 million to nearly $4 billion in total sales. Only two of the eight companies have made recent use of sales of bonds to obtain funds, and, in each case, the amount involved was less than $50 million—well under 2 percent of total corporate resources.

The 27 companies that perceived an increase in financial risk during the period 1979 to 1981 also represent a cross section of industries that ranged across all size categories, as measured by total sales. There is a high concentration of large companies, with 16 of the 27 (60 percent) in the two largest categories (sales in excess of $1 billion).

One might expect a close relationship between company perceptions concerning financial risk and whether such companies resort to borrowing. In the case of the 27 companies that perceived an increase in financial risk, 15 (56 percent) currently or recently have engaged in bond financing. As previously noted, in the case of the eight companies that perceived a reduction in financial risk, only two currently or recently engaged in bond financing. In the case of the 14 companies that perceived no change in financial risk, only four (29 percent) engaged in recent bond financing.

Considering the 12 companies that reported an increase in financial risk but have not engaged in bond financing recently, it is interesting that more than half of these companies have a ratio of long-term debt to equity in excess of 20 percent, and that more than half of these companies have experienced an increase in this ratio over the past five years. In addition, one out of four of these companies has substantial debt-service burdens, with interest expense in excess of 25 percent of pretax profits.

By contrast, companies that perceived a reduction in financial risk generally have not been borrowing in the capital markets, have been reducing outstanding debt, and have a downward trend in the ratio of interest expense to pretax profit. The following statement by the chief financial officer of a manufacturer of glass and packaging products illustrates these relationships:

> "Our company is in the unique position of being able to reduce debt, thereby reducing financial risk. A few years ago, we decided to take drastic action until we got our house in order. We are a net cash investor, not a borrower. In our priorities, cash flow takes precedence over earnings."

Factors that Influence Financial Risk

The 50 respondents were asked to identify the factors they believe have caused changes in financial risk. Their replies are summarized in Table 4 where these factors are ranked in the order of importance assigned by the respondents.

On an overall basis, high interest rates, the drying up of the bond market, and fluctuating interest rates were cited the three most important factors influencing a change in financial risk. Thus, as a group, the 50 cooperating respondents ranked conditions in the credit markets as the primary set of factors bringing about a change in financial risk in the period 1979 to 1981. The second most important set of factors bringing about a change in financial risk in the same period was susceptibility to variation in internal financial conditions.

Examining the rankings of these same factors as reported by companies that perceived a reduction in financial risk reveals several differences from other companies. Companies that noted a reduction in financial risk ranked fluctuating interest rates as the sixth most important factor, as compared with the third rank accorded it by other companies. The reason is that most companies experiencing a reduction in financial risk have been debt repayers rather than borrowers.

A point of similarity between companies that perceived a reduction in financial risk and those that saw no change is that both groups assigned the same rank to weak growth in internal cash flow. Companies that perceived an increase in financial risk ranked a weak growth in internal cash flows higher in importance. In the case of companies that experienced a reduction in financial risk, a weak growth in internal cash flows might have led to more conservative financing policies aimed at reducing the relative incidence of debt and related-interest expense. The successful execution of these more conservative policies would, of course, result in a reduction in financial risk.

A final point to comment on is the difference in rank assigned to excessive debt (ranked fifth by all companies, seventh by companies perceiving increased financial risk, and third by companies perceiving a reduction in financial risk). In the case of companies that perceived a reduction in financial risk, the relatively high ranking squares with these companies' general reduction in debt as a policy objective.

Management Responses to Financial Risk

Corporate financial managers have at least three major goals in mind when they attempt to manage and control the financial risks to which their companies are exposed. First, they seek to establish financial performance yardsticks that will measure the acceptable levels of financial risk in light of the firm's strategic plans and